

The role of geriatric day hospitals in the care of the elderly

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Abstract

A day hospital is an important adjunct to in-patient care in geriatric practice. The functions of a geriatric day hospital have been stated as rehabilitation, maintenance, assessment, medical and nursing care, and social care. However, the central role of a geriatric day hospital is to provide multidisciplinary rehabilitation for patients with chronic disability. For this rehabilitative role to be realized, a day hospital has to be provided with adequate social and medical supportive services, together with a reliable transport system.

Keywords: Day care; Aged; Rehabilitation

Introduction

The medicine of old age is concerned not only with the diagnosis and treatment of disease but also with assessing and reversing the functional and social consequences by organizing a variety of professional help and support services. This is the rehabilitation approach, with emphasis placed on the multidisciplinary team efforts, careful goal planning, continual assessment and functional recovery.

Hospital admission for an elderly patient is potentially disabling. The patient will often have been separated from his spectacles, hearing aid and walking stick, and this will make it difficult to negotiate the new and unfamiliar environment, predisposing the patient to ward accidents. Sleep deprivation due to noise and anxiety will depress one's morale. The social support network may have weakened, with perhaps a hardening of attitudes by relatives and neighbours who may be unwilling to resume the burden of support.

The problems associated with hospital admission are a good reason for looking for alternatives to hospital care for those patients who are sufficiently independent or have sufficiently good support to be able to remain in the community. A day hospital is an important adjunct to in-patient care in geriatric practice. Ever since the opening of the first geriatric day hospital (GDH) in Oxford in 1958, it has been increasingly recognized as an essential part of the geriatric service.¹

Functions of geriatric day hospitals

Day hospitals provide all the facilities of in-patient rehabilitation without the problems and financial costs associated with hospital stay. The investigational and therapeutic aspects of treatment are separated from the hotel aspect which often requires patients to remain in hospital in the evening, at night and at the weekend when nothing of therapeutic benefit is taking place.

The review by Brocklehurst and Tucker² shows widespread variation in the use of day hospitals in the United Kingdom, with day hospitals fulfilling different functions in different settings. At one extreme they provide an alternative to admission of patients requiring intensive investigation and short-term treatment of medical problems. At the other extreme day hospitals may be used to support chronically disabled elderly people in the community. The functions of a geriatric day hospital have been stated in Brocklehurst's review as:

1. Rehabilitation

Rehabilitation means to regain abilities, or to overcome disability. A more useful definition of rehabilitation for the elderly is 'the restoration of the individual to the optimal level of ability within the needs and desires of the individual and his or her family'.³ Another approach is to see rehabilitation as the gradual planned withdrawal of support⁴ to emphasize that rehabilitation is a finite and dynamic process anticipating functional recovery or improvement.

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2. Maintenance
The objective of maintenance is to maintain the degree of independence achieved by rehabilitation.
3. Assessment
Assessment entails forming an opinion of the patient's physical, mental and social functions and devising a plan to achieve the optimum for that patient. A complete assessment of a patient is essential for setting an appropriate goal in rehabilitation and in determining the proper type of residential placement for the aged.
4. Medical and nursing care
Day hospitals allow specialist investigations, prolonged observation and monitor of treatment, as well as nursing procedures such as dressings, administration of medication, bathing for the handicapped and data recording.
5. Social care
The objective of social care is to provide social contact to isolated patients and to relieve carers of the stress and strain of coping with a disabled.

Of these five functions, rehabilitation has been ranked by geriatricians as the most important.² Since the central role of geriatric day hospitals is to provide multidisciplinary rehabilitation for patients with chronic disability, they are staffed with physiotherapists, occupational therapists, chiropodists, social workers, as well as doctors and nurses. This rehabilitative input helps patients to recover from the disabling diseases associated with old age such as strokes and arthritis, and in enabling the elderly to cope with difficult social conditions such as living alone.

Social contact or relief as the only purpose is generally not regarded by geriatricians as a function of day hospitals.^{5,6} Such patients should instead attend day centres for the elderly, where the activities are predominantly social and diversional, under the responsibility of social welfare department and/or voluntary organizations. In practice, such social cases may still be attending day hospitals because of lack of places or lack of transport in day centres. Patients requiring longer maintenance treatment but are too handicapped for a day centre may attend community day hospitals staffed by higher ratio of nurses to therapists.⁷

Advantages of day hospitals

The advantages of day hospital over in-patient rehabilitation are:⁵

1. De-institutionization
Day hospitals tend to promote independence in

the community, avoiding the problems associated with institutionization; viz. loss of autonomy, loss of social contact and custodial care.

2. Patient acceptability
They allow patients to be treated while remaining in the known environment.
3. Effective use of skilled staff
Day hospitals allow spreading the facilities around a greater number of patients. Thus, by varying the weekly attendance frequency, a 40-place day hospital can maintain from 100 to 200 patients at home.
4. Home carers involved
Home carers form a cost-effective resource, since their help is given either free or is spread over a number of elderly people, enabling them to live relatively independent lives at home. Most of the helpers would not be available to support elderly patients in hospital. They increase greatly the number of personnel available to care for the old at home.

The local scene

In Hong Kong, the first GDH was opened in 1975 at Princess Margaret Hospital and this was subsequently relocated to South Kwai Chung Polyclinic in 1983. Currently there are five GDHs in the public sector: the South Kwai Chung GDH serving the New Territories West, Prince of Wales Hospital GDH the New Territories East, Yung Fung Shee GDH the East Kowloon, Ngau Tau Kok the rest of Kowloon and Ruttonjee the Hong Kong Island.

Patients may be referred from the community or following discharge from hospital. They attend at a frequency of three times per week to monthly, and typically arrive in the morning by ambulance, stay for the day, during which they receive treatment, and return home in the late afternoon.

Factors affecting the performance of geriatric day hospitals

The following factors are recognized as important in influencing the performance of a GDH:

1. Social supportive services
Discharge of treated but isolated patients depends on the availability of appropriate social support: day centres, community care and special residential support. If such resources are not available, the proportion of chronic attendants will increase and the activity of a day hospital will drop. The

importance of day centre support to day hospital has been emphasized by various authors.^{1,8,9} Many patients, especially those who live in isolation, may require only social contact or simple day-time supervision. Without this support, they may return to a state of apathy and neglect and rapidly deteriorate. This often comes to light at the time of a patient's discharge when it is clear that continued social contact is desirable.

2. Medical supportive services

Optimum functioning of a geriatric day hospital depend on the availability of in-patient beds in geriatrics/psychogeriatrics and an integrated health service. The distinction of day hospital from day centre and the referral of appropriate new patients suitable for rehabilitation will restrict the number of social cases.^{7,10}

3. Day hospital staffing and operation

Martin and Millard¹¹ emphasized the importance of adequate staffing by therapists. A day hospital has to be supervised by a senior geriatrician,¹² and regular multidisciplinary case conferences held to decide on patient management and future care. Each day patient should have stated goals and should move on to some other form of care once these goals have been achieved. This helps to prevent the accumulation of chronic attendants. Barker and McCarthy¹³ showed that a day hospital led by consultants performed better than by general practitioners.

4. Transport

Patients attending the geriatric day hospital are generally elderly having varying degrees of difficulties in mobility. The availability of adequate transport therefore is crucial to the viable operation of geriatric day hospitals.^{2,9} The key to a successful day hospital is a flexible, reliable transport system that can bring patients on time for the treatment they require and return them when they have been treated.

Evaluation of activity of geriatric day hospitals

Martin and Millard¹⁴ have pointed out that since the primary objective of day hospitals is to give an out-patient rehabilitative service to the community, a rehabilitative factor should be taken into account when reporting activity. By this they mean an assessment of the optimum average length of attendance of new patients at day hospital. They have thus derived a new patient index, later revised as the corrected new patient index (CNPI) to measure the activity of a day hospital:

$$\text{CNPI} = \frac{\text{Number of new patients} \times 10}{\text{Total attendance}}$$

An active day hospital would have a CNPI approaching one, whereas an inactive day hospital would have a CNPI approaching zero. A day hospital with a CNPI of one means that active rehabilitation is the main role so that patients attend for a finite period (10 visits in Martin and Millard's study) and then discharged once the optimum functional state is achieved. A day hospital with a CNPI of zero means that chronic attendants predominate; they are often static patients attending indefinitely for maintenance or social care. One of the essential trends in day hospital development has been to emphasize the rehabilitative role, and to ensure that day hospitals do not become expensive clubs for a static and elite local group of elderly people.⁵

The activities of two GDHs at Yung Fung Shee and Ngau Tau Kok, as assessed by the corrected new patient indices, from 1987 to 1991 are shown in Figure 1. It can be seen that both geriatric day hospitals showed increasing activities from 1987 to 1991, reflecting an increasing emphasis on the role of active rehabilitation in day hospital.

The local day hospital activities are compared with some United Kingdom studies^{9,10,13,14} in Figure 2. It can be seen that there is a wide variation in the CNPI from different studies. The highest activity was from Martin and Millard's series with a maximum CNPI of

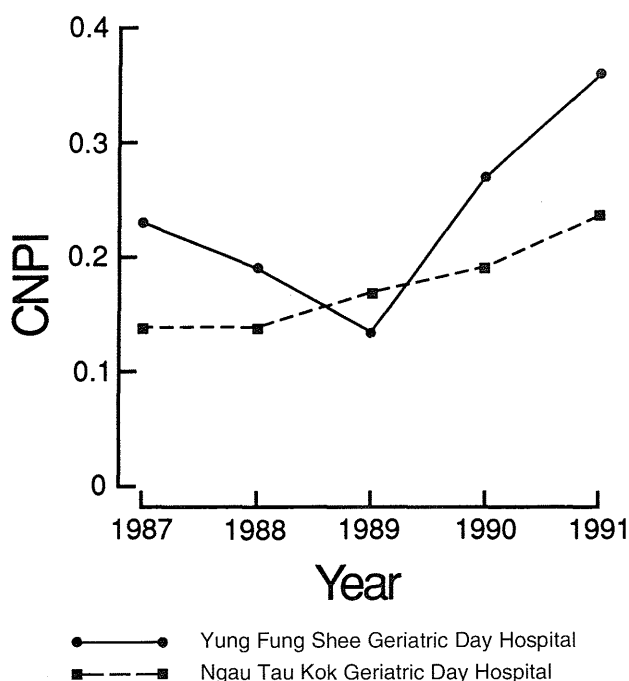


Fig. 1. Activity as measured by corrected new patient index (CNPI).

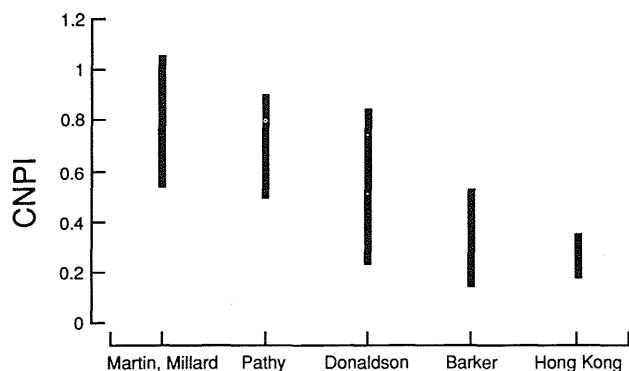


Fig. 2. Geriatric day hospital activities: Hong Kong vs United Kingdom.

one. The local day hospital activities were low compared with the United Kingdom studies. Several factors account for the low CNPI of the day hospitals studied. The local geriatric day hospital population actually consisted of a combination of a static core of around 30%–40% of chronic attendants with CNPI approaching zero, together with a higher turnover group undergoing active rehabilitation with CNPI approaching 0.5 so that the overall CNPI appear low. The high proportion of chronic attendants is due to the lack of day centre facilities, long waiting time for elderly residential service, and the lack of an integrated health service similar to the National Health Service in the United Kingdom to provide medical care for the elderly upon discharge. If the rehabilitative role of the local geriatric day hospitals is to be fully realized, the adequate provision of such supportive services is essential.

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